JOANNA ANDERSON
CHRISTOPHER BOYLE
JOANNE DEPPELER

THE ECOLOGY OF INCLUSIVE EDUCATION: RECONCEPTUALISING BRONFENBRENNER

INTRODUCTION

Globally, student populations in government-run schools are becoming increasingly diverse (see Gonski, 2011; Rashid & Tikly, 2010; Voltz, Sims & Nelson, 2010). Simultaneously, students are being excluded from school, or placed into segregated educational settings in increasing numbers. Both the social and economic costs of disengagement and exclusion from, and inequalities within education systems have been well documented (see Snow & Powell, 2012; OECD, 2010; Wilkinson & Pickett, 2010). The causes of these issues are complex and many sit beyond the boundaries of the school fence. Despite this, governments place much of the responsibility for delivering an equitable education with schools (Wrigley, Thomson & Lingard, 2012). While this may in many ways seem an impossible task, "just because schools can't do everything doesn't mean they cannot achieve something" (Thomson, Lingard & Wrigley, 2012, p. 20). Thomson *et al*, (2012) maintain this can only be enacted through *change reform*, with an equitable redistribution of resources, and a recognition and value of difference. The task is challenging. Schools work in tightly controlled education systems with high levels of accountability and expectations for continued improvement, however the consequences of not providing an equitable education system are far reaching (Wilkinson & Pickett, 2010). So the question is no longer *should* a quality education be provided to all, but rather, *how* this change reform can be enacted (Jackson, 2008).

EDUCATION FOR SOCIAL JUSTICE: MOVING TOWARDS A FAIRER SOCIETY

More than 300 years BC, in his Socratic dialogue *The Republic*, Plato argued for the importance of a formalised system of education for the development of a fair and just society. He recognised the valuable benefaction of a society providing an apposite education to its citizens and noted the influence it had in determining the direction one's life would take. In the more than 2,300 years since Plato's dialogue, many infamous works have been published contesting the importance of education in the development of socially just and fair societies (More's *Utopia*, 1516 and Rousseau's *Emile*, 1762 are just two examples). Despite this, today's educationalists, philosophers and others are still arguing the case for education and

its role in promoting fairness and social justice; an increasingly important argument as the gap between the *have* and *have nots* globally, continues to grow (Wilkinson & Pickett, 2010; OECD, 2010).

Recently, the OECD (2012) established that "an equitable education system can redress the effect of broader social and economic inequalities" (p. 15). In an earlier paper prepared for the OECD, Field, Kuczera and Pont (2007) identified and described two dimensions of an *equitable education*; the first, *fairness*, stipulates that personal and social circumstances (such as gender, ethnicity and socio-economic status) should not present obstacles to educational achievement, whilst the second dimension, *inclusion*, ensures that all individuals reach a basic minimum standard of education. The assumption may then be drawn that if a society can provide an equitable educational system, it is on its way towards a fairer and more socially just existence. This is supported by Gonski (2011), in his final report into school funding in Australia, where he states, "As many researchers have found, higher levels of education are associated with almost every positive life outcome – not only improved employment and earnings, but also health, longevity, successful parenting, civic participation and social cohesion" (p. 19). Taking it further, The *World declaration on Education for All* (Unesco, 1990) concluded that "education can help ensure a safer, healthier, more prosperous and environmentally sound world, while simultaneously contributing to social, economic, and cultural progress, tolerance, and international cooperation" (p. 2). Education systems have a responsibility to promote social justice through the equitable distribution of quality education to all children, a system based on *fairness* and *inclusion* – known as inclusive education (IE).

DEFINING INCLUSIVE EDUCATION

An evolving construct

Inclusion and *IE* are terms used frequently within education research, policy and programs globally, creating "competing discourses through which meaning and understandings differ" (Graham & Slee, 2008, p. 277). There is general agreement that IE should be understood as a dynamic rather than a static process; it is "a journey, not a destination" (Topping, 2012, p. 9) and more recently the term has moved from a focus on students with disabilities to encompassing the delivery of education to all (Ainscow & Miles, 2008). Nevertheless, there is much discourse debating the semantics of IE and whilst it should be acknowledged this has and continues to create confusion for those responsible for its delivery (Graham & Slee, 2008), Wrigley *et al*. (2012) and Slee (2011) attest it is time to shift the focus from defining IE to that of challenging educational exclusion. Even so, when writing about IE a definition of the construct is necessary, and for the purpose of this chapter, IE will be referred to as "a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning,

cultures and communities, and reducing exclusion within and from education" (Unesco, 2005, p. 13).

Inclusive education and the individual learner

The past two decades have seen the publication of much research examining what constitutes effective IE for the individual (see Black-Hawkins, 2010; Booth & Ainscow, 2002). Three factors consistently appear across much of the literature, though in varying forms and under the guise of differing terminology. It should be noted these are presented in no particular order and one does not hold greater value or weighting than another. The first is *participation*. Booth and Ainscow (2002) define this concisely in the *Index for Inclusion* as being "learning alongside others and collaborating with them in shared learning experiences. It requires active engagement with learning and having a say in how education is experienced" (p. 3). The second is *achievement*, not in terms of standardised scores but rather against articulated, learning goals. A student must achieve 12 months worth of learning for 12 months worth of schooling (Hattie, 2012). It is important to note here, as pointed out by Guskey (2013), that achievement in education should be seen as a "multifaceted construct" (p. 29); different learning or curriculum areas require different sets of knowledge and skills to be demonstrated. The final factor is *value* or rather, *value of person*. Aspin (2007) describes value of person as being when one is accepted, respected, and seen as important and capable of doing. It is demonstrated through action and relationships with others.

All students within an IE environment must be participating, achieving and valued. This will (and should) look different for different students in different classrooms, in different schools, across different educational jurisdictions. While it is acknowledged that this presents a challenge for teachers, schools and policy makers alike, the consequences of not including all students are significant.

THE OUTS AND INS OF INCLUSIVE EDUCATION

A focus on exclusion

Exclusion can present itself directly, through exclusion within schools (from particular lessons, peers groups, and/or other school day activities) or segregation from the local school into a separate school setting (such as those still existing in many countries for students with a disability), as well as more subtly through practices such as labelling (see Lauchlan & Boyle, 2007; Boyle, 2014, for a discussion on the impact of labelling). Slee (2011) describes exclusion as an opportunity to "separate and sort children into their allotted tracks, into the streams that assign them to unequal destinations" (p. 151). The ramifications of these *unequal destinations* are far reaching. They impact on both the individual being excluded and society as a whole, through lower rates of employment, lower incomes, poorer housing, higher crime rates, poorer health, increased family

breakdowns (Topping, 2012), increased substance abuse, increased teenage pregnancy, increased mental health issues, and lower life expectancy (Wilkinson & Pickett, 2010). Along with the ethical issues surrounding these inequalities, they come with a high economic cost (OECD, 2010). The evidence is damning; exclusion from education is not the answer to advancing towards a fairer and more just society. Maybe its antithesis, IE, is.

Benefits of Inclusive Education

Like exclusion, IE has widespread ramifications. Unlike exclusion however, the consequences are almost always positive. Most research has found in favour of IE over exclusion for individual students, both in terms of academic and social outcomes (Loreman, Deppeler & Harvey, 2011). In his study into the withdrawal of students for *support*, Jackson (2008) found students achieved neutral or negative gains; the greatest results occurred when IE was enacted effectively. Additionally, in a 2009 paper, Allan concluded from a number of studies that a majority of school students advocated for IE as they viewed "themselves as *needing* exposure to the diversity they are expected to live with as adults" (p. 246). Once adults, IE has shown to increase the employability of school leavers and reduce inequalities in both economic (OECD, 2010) and social outcomes (Wilkinson & Pickett, 2010).

The benefit to schools is also great. IE assists children and teachers alike to increase their tolerance, understanding and value of difference (Boyle, Scriven, Durnin & Downes, 2011), perpetuating the continued development and improvement of the IE school culture. Within this environment, teachers are encouraged and challenged to use a variety of pedagogies and strategies to cater for the different learning needs and this can have a positive impact on all students (Boyle, Topping, Jindal-Snape & Norwich, 2012; Loreman *et al*, 2011).

Finally, Wilkinson and Pickett (2010) argue that "reducing (*educational*) inequality leads to a very much better society" (p. 197) as greater equality benefits not only those who are considered the *have not's*, but all members of society. IE has the potential to break cycles of disadvantage (Snow & Powell, 2012), as well as to increase the skills of people, leading to increased innovation and productivity, and subsequently to long-term economic viability (OECD, 2010).

A necessary reform

With so much at stake the need for IE is clear, and many governments have recognised this. Nevertheless, much of the responsibility for this change reform has been laid at the feet of schools (Ainscow, Dyson, Goldrick & West, 2012; Thomson, Lingard & Wrigley, 2012), with an expectation that educators work together and "share responsibility, decision making and accountability for the progress of *all* students" (Deppeler, 2012). However, schools do not sit in isolation from the communities and wider State, National, global and historical contexts

within which they operate. These external factors, along with internal school and classroom factors, will determine the success (or not) of IE. To enable schools to enact this change reform, they (along with those setting the education agenda) need "an understanding of the various drivers, (and) established cultures" that influence IE, "as well as the interplay between these at local, state and national levels" (Deppeler, 2013, p.188). In addition there needs to be an understanding of how IE can ultimately influence the *participation*, *achievement* and *value* of all students.

INCLUSIVE EDUCATION AND BRONFENBRENNER

IE is a social construct; it relies on relationships between people and societal systems to become constructed into what can be observed and called *IE*. By definition, it is the process whereby people are included into a socially constructed environment, or alternatively excluded from it (Mac Ruairc, 2013; Slee, 2012). Given the social nature of IE, any attempt to study either the construct as a whole, or aspects of it, must consider the relationships between various people and societal systems involved in its construction, from the individuals being *included* to the national and global contexts within which it is situated. Social ecological theory, developed in the early 1900's by academics at the University of Chicago (see Park, 1936), recognised that individuals sit within larger societal systems and provided a loose framework to describe and study the factors that sit within the various systems.

In his 1976 seminal publication *The experimental ecology of education*, Urie Bronfenbrenner adapted the social ecological theory to the field of education. He identified two determinants of student learning: the first being the characteristics of the learner and the environments in which they exist, and the second the relationships and interconnections between them. Bronfenbrenner's ensuing framework, known as *ecological systems theory*, provided a structure to identify and organize the influencing factors that sit within different environments, and to study the relationships and interconnections between them. In a later paper, Bronfenbrenner reconceptualised his theory to become the *bioecological model of human development* (Bronfenbrenner & Morris, 2007), where the focus shifted from studying environmental influences on human development to the developmental processes one experiences through the course of time. He noted that the use of the *ecological systems theory* model had "provided far more knowledge about the nature of developmentally relevant environments, than about the characteristics of developing individuals" (p. 795).

This distinction between Bronfenbrenner's two theories is interesting when the construct of IE is considered, as it is precisely the characteristics of the learner that should *not* influence whether or not a student is delivered an effective IE. It is, however, the environments and factors that sit within these, along with the relationships and interconnections between them that influence the success (or not) of IE.

Bronfenbrenner's (1993) *ecological systems theory* has been utilized as a "conceptual and operational framework" (p. 38) in other educative and social science fields (see De Wet, 2010; Daro & Dodge, 2009), though up until now it has not been reconceptualised to build knowledge and increase understanding of IE. Despite this, the theory offers an invaluable framework with which to organize the environmental factors and understand their influence on inclusivity by placing the learner at the centre and each contributory factor in relation to the learner's educational ecosystem – resulting in *The ecology of inclusive education*.

Figure 1. The ecology of inclusive education.

SYSTEMS OF INFLUENCE

Bronfenbrenner (1976) describes the environments within which a learner exists as a "nested arrangement of structures" (p. 5), which he labelled as five systems. The innermost system, the *micro-system*, holds the learner at its centre with the immediate setting or settings surrounding them. The next system, known as the *meso-system*, acknowledges the interrelations between the major settings in the micro-system. Encircling this is the *exo-system*, described as containing the formal and informal structures that "impinge upon or encompass the immediate settings containing the learner" (p. 6). The final environmental system is the *macro-system* and is the culture that encompasses all preceding systems. The fifth system, known as the *chrono-system*, represents the movement of time. Each of these systems has a relationship and connectedness with the system or systems placed either side of it. Relationships and connections also exist between the factors sitting within each system.

Five systems of inclusive education

Sitting at the centre of the *ecology of inclusive education* framework is the learner. All that occurs within and between each of the five systems, the decisions and actions that are taken, are done so on the premise that it will benefit the learner. As described earlier, there are three determinants of IE for the learner - participation, achievement and value. Participation requires the learner to be actively engaged in all aspects of schooling, both academically and socially. They must be working collaboratively with their peers and involved in rich and meaningful learning experiences developed from a relevant curriculum (Evans, 2012). Additionally, learners must have a voice in the aspects of schooling that impact them (Portela, 2013) and have the opportunity to take part in whatever elements of school life interest them. Yet participation is not enough; learners must also be achieving. This dictates access to learning goals that meet individual needs within the bounds of the curriculum, and assessment that is offered in meaningful and attainable ways (Slee, 2012). Lastly, learners must be valued, for whom they are and what they have to offer, to others and to the school itself. The learner must be accepted and respected as themselves, feel they hold a place of value within the school and know

that others believe in their ability to "do" (Aspin, 2007). Whilst easily described, participation, achievement and value do not transpire in an educational vacuum. There are many factors that sit within various systems of the *ecology of inclusive education* that influence, and at times put pressure on, the three determinants of IE. These are discussed in the following paragraphs.

Micro-system This system sits directly around the learner and contains all the factors that exist within the environments in which the learner directly experiences both formal and informal learning, as well as the social aspects of schooling. It includes the teacher or teachers, non-teaching staff, peers, physical learning spaces, classroom cultures and routines, resources, and the playground.

Meso-system This system is different from the others in that it promotes the notion that the factors sitting within the micro-system do not do so in isolation from one another. Relationships and connections between them are continuously occurring, changing and evolving; they are never static but rather dynamic influences on the learner sitting at the centre of the framework.

Exo-system The factors that sit here do not exist directly within the learner's immediate environment, however still maintain influence over the learner's experience of schooling. They include school leadership structures, teaching and non-teaching staff, school culture, values and ideology, authority and collaborative patterns (leaders, staff, students, parents, community), support structures, resource allocation, school rituals, school policies and procedures, and the student cohort.

Macro-system Here sit the factors that exist outside the physical environment of the school but nevertheless, influence the inner systems within the framework and consequently the learner at its centre. It encompasses the varying contexts in which the school exists – social, political, historical and global – as well as other factors such as the education system or systems, current agendas (standardisation of student achievement and professional performance; increased accountability), and, if applicable, a mandated curriculum.

Chrono-system Like the meso-system, this system is different from the others. It considers the movement of time and the impact or influence of this on the learner. As the *ecology of inclusive education* framework has been designed with the learner at its centre, the timeframe for this system is that of the learner's enrolment within formal school education - the years of primary and secondary schooling.

Relationships and interconnectedness: influence and responsibility

Each factor sitting within the systems of the *ecology of inclusive education* is influenced by other factors within the same and other systems. The amount of influence a factor has on the experience of IE for the learner will depend on where the systems are positioned within which a factor sits, as well as by the importance

attached to a factor by those responsible for the system. The largest of the systems, the macro-system, does not have a singular body responsible for the factors that sit within it. These factors are determined by global and national contexts. Factors within the macro-system may have influence attached to them by one or more of these contexts (for example, systemic influence such as mandated curriculum, improvement targets and professional standards, or political influence such as funding models), whilst for others the level of influence will be determined by those holding account for the exo- and micro-systems. Responsibility for these two systems is reasonably self-evident. Factors sitting within the exo-system are concerned with school-wide practices and are the domain of school leadership. Decisions made at this level influence the micro-system - the domain of the teacher. Again, levels of influence may be determined by school leadership (for example, mandates may exist concerning school-wide processes such as timetabling and resource allocation), however the teacher will directly influence other factors that may include the set up of the physical space and pedagogical practices. The chrono-system sits outside the other systems and represents the constant and consistent movement of time. It provides opportunity for reflection, change, reform, and evolution of the factors that sit within each system; an essential component of the framework as IE is a dynamic and evolving process. Thus, the *ecology of inclusive education* assumes multiple levels of influence that are invariably interactive, whilst reinforcing either IE or exclusionary practices.

Globally, there are very few, if any, education systems or schools providing a fully inclusive education (Inclusion International, 2009). Actualising IE has proven difficult, most notably for those countries that have been pursuing the agenda for a long time (Allan, 2011). For this reason, renowned academics in the field, such as Roger Slee (2011) and Mel Ainscow (with Miles, 2011), are vocal advocates of further research into IE. The *ecology of inclusive education* provides a framework with which researchers are able to better understand not only the factors that influence IE, but also the relationships and connections they have with one another and the environments in which they sit.

RESEARCH AND THE ECOLOGY OF INCLUSIVE EDUCATION

Almost four decades ago, Bronfenbrenner (1976) established a convincing argument in his *ecology of education* theory for the need to shift educational research away from the traditionally adopted scientific methods towards a contextually perceptive and flexible approach. Today, this is a given. Since that time, Bronfenbrenner's theory has provided researchers across many fields a framework with which to make sense of and manage studies that are situated in societal environments (Daro & Dodge, 2009), whilst the exploration of constructs with multiple effects takes place (De Wet, 2010). Nevertheless, the examination of education environments and IE still present researchers with many challenges. It is widely acknowledged that schools are complicated, messy and changeable environments (Ainscow *et al*, 2012). On top of this, IE is a complex construct that

has yet to receive a globally recognised definition (Topping, 2012: Slee, 2011). The re-conception of Bronfenbrenner's theory as the *ecology of inclusive education* extends to researchers an operational, theoretical framework within which to situate their work, one that supports the contextually diverse environments educational researchers access, while affording the flexibility to focus on individual or combinations of varying aspects of IE. Other advantages are afforded to researchers adopting this framework. The *ecology of inclusive education* allows for studies adopting either quantitative or qualitative approaches and can be used for small studies taking a snapshot of a single point in time or large-scale in-depth studies conducted over many years, across any number and type of school settings. The framework supports comparative studies and the focus of the research may be on systemic, institutional or ideological aspects of IE. Within this, single factors, groups of factors or whole systems can be studied, and the relationships and connections between them investigated. Most notably, the *ecology of inclusive education* does not attempt to neaten the messiness that are school environments. Rather it provides a framework with which to explore the messiness in all its forms through the lens of IE, increasing current knowledge and understanding of how IE is constructed in different environments and the consequences of this for all learners.

CONCLUSION

In 2010, the OECD reported that in a small number of countries, including Canada and South Korea, student achievement was increasing regardless of the school attended or personal and social circumstances of individuals. Nevertheless, this is not a global trend. In many countries the gap between the academic achievements of students from disadvantaged backgrounds and their peers is growing, as many education systems continue to, though perhaps not intentionally, encourage inequity through the delivery of exclusionary practices. Along with others in the field, Ainscow, Dyson, Goldrick and West (2012) argue this inequity must be challenged and proffer the question "What needs to be done to move policy and practice forward?" (p. 150). To know what must be done, current systems and practices need to be better understood, through the undertaking of quality, in-depth research into IE (Ainscow & Miles, 2011). This must encompass not only schools and the environments within which they operate, but also work to understand the relationships between the factors that influence IE. The *ecology of inclusive education* delivers a framework with which to do this. With increased understanding, policy and practice can move forward, and "make the physical, social, cultural and educational arrangement of schooling better for all" (Slee, 2011, p. 13).

REFERENCES

Ainscow, M., Dyson, A., Goldrick, S. & West, M. (2012). *Developing equitable education systems*. Abington, Oxon: Routledge.

Ainscow, M. & Miles, S. (2011). Introduction: learning about diversity. In M. Ainscow & S. Miles (Eds.) *Responding to diversity in schools: An inquiry-based approach*. Oxon, UK: Routledge.

Ainscow, M. & Miles, S. (2008). Making education for all inclusive: where next?. *Prospects*, *38*(1), 15-34.

Allan, J. (2011). Complicating, not explicating: taking up philosophy in learning disability research. *Learning Disability Quaterly*, *34*(2), 153-161.

Allan, J. (2009). Teaching children to live with diversity: a response to 'Tocqueville on democracy and inclusive education: a more ardent and enduring love of equality than of liberty'. *European Journal of Special Needs Education*, *24*(3), 245-247.

Aspin, D. (2007). The ontology of values and values education. In D. Aspin & J. Chapman (Eds.) *Values education and lifelong learning: principles, policies, programmes*. Dordrecht, The Netherlands: Springer.

Black-Hawkins, K. (2010). The framework for participation: a research tool for exploring the relationship between achievement and inclusion in schools, *International Journal of Research & Method in Education*. *33*(1), 21-40.

Booth, T. & Ainscow, M. (2002). *Index for inclusion: developing learning and participation in schools*. Bristol, UK: CSIE.

Boyle, C. (2014). Labelling in special education: where do the benefits lie? In A. Holliman (Ed.) *The Routledge International Companion to Educational Psychology*. London: Routledge.

Boyle, C., Scriven, B., Durnin, S. & Downes, C. (2011). Facilitating the learning of all students: the 'professional positive' of inclusive practice in Australian primary schools. *Support for Learning*, *26*(2), 72-78.

Boyle, C., Topping, K, Jindal-Snape, D. & Norwich, B. (2012). The importance of peer-support for teaching staff when including children with special educational needs. *School Psychology International*. *33*(2), 167-184.

Bronfenbrenner, U. & Morris, P. (2007). The bioecological model of human development, in *Handbook of child psychology*. Online at http://onlinelibrary.wiley.com/doi/10.1002/9780470147658.chpsy0114/abstract.

Bronfenbrenner, U. (1993). Ecological models of human development. In M. Gauvain & M. Cole (Eds.) *Readings on the development of children*, *2nd Edition*. New York, USA: Freeman.

Bronfenbrenner, U. (1976). The experimental ecology of education, *Educational Researcher*. *5*(5), 5-15.

Daro, D. & Dodge, K. (2009). Creating community responsibility for child protection: possibilities and challenges. *The Future of Children*, *19*(2), 67-93.

Deppeler, J. (2013) Developing equitable practices in schools: professional collaboration in research. In P. Jones (Ed). *Bringing insider perspectives into inclusive teacher learning: potentials and challenges for educational professionals*. New York, USA: Routledge.

Deppeler, J. (2012). Developing inclusive practices: Innovation through collaboration. In C. Boyle & K. Topping (Eds). *What works in inclusion?*. Maidenhead, England: Open University Press, McGraw-Hill Educatio.

De Wet, C. (2010). Victims of educator-targeted bullying: a qualitative study, *South African Journal of Education*. *30*, 189-201.

Evans, D. (2012). Curriculum adaptations. In A. Ashman & J. Elkins (Eds.) *Education for inclusion and diversity*. Frenchs Forest, Australia: Pearson Australia.

Field, S., Kuczera, M. & Pont, B. (2007). *No more failures: ten steps to equity in education*. OECD Publishing.

Gonski, D. (2011). *Review of school funding: Final report*. Canberra, Australia: Department of Education, Employment and Workplace Relations. Online at http://www.schoolfunding.gov.au/review.

Graham, L. & Slee, R. (2008). An illusionary interiority: Interrogating the discourse/s of inclusion. *Educational Philosophy and Theory*, *40*(2), 277-293.

Guskey, T. (2013). Defining student achievement. In J. Hattie & E. Anderman (Eds.) *International guide to student achievement*. New York, NY: Routledge.

Hattie, J. (2012). *Visible Learning for Teachers: Maximizing Impact on Learning*. Abington, Oxon: Routledge.

Inclusion International. (2009). *Better education for all: when we're included too – a global report*. Salamnca, Spain: Instituto Universitario de Integración en la Comunidad.

Jackson, R. (2008). Inclusion or segregation for children with an intellectual impairment: What does the research say?. Online at http://disability-studies.leeds.ac.uk/files/library/Jackson-Inclusion-Seg1.pdf.

Lauchlan, F. & Boyle, C. (2007). Is the use of labels in special education helpful?. *Support for Learning*. *22*(1), 36-42.

Loreman, T., Deppeler, J. & Harvey, D. (2011). *Inclusive education: supporting diversity in the classroom*. Crows Nest, Australia: Allen & Unwin.

Mac Ruairc, G. (2013). Including who? Deconstructing the discourse. In G. Mac Ruairc, E. Ottensen & R. Precey (Eds) *Leadership for inclusive education: values, vision and voices*. Rotterdam, The Netherlands: Sense Publishers.

More, T. (1516). *Utopia*. Retrieved from the University of Adelaide: eBooks@Adelaide. http://ebooks.adelaide.edu.au/m/more/thomas/m83u/.

OECD. (2012). *Equity and education in education: supporting disadvantaged students and schools*. OECD Publishing.

OECD. (2010). *The high cost of low educational performance: The long-run economic impact of improving PISA outcomes*. http://www.oecd.org/pisa/pisaproducts/pisa2006/44417824.pdf.

Park, R. (1936). Human ecology. *American Journal of Sociology*, *42*(1), 1-15.

Plato. (approx 380BC). *The Republic*. Retrieved from the University of Adelaide: eBooks@Adelaide. http://ebooks.adelaide.edu.au/p/plato/p71r/.

Portela, A. (2013). Students and leadership for inclusion. In G. Mac Ruairc, E. Ottensen & R. Precey (Eds) *Leadership for inclusive education: values, vision and voices*. Rotterdam, The Netherlands: Sense Publishers.

Rashid, N. & Tikly, L. (2010). *Inclusion and diversity in education: Guidelines for inclusion and diversity in schools*. Martinez Campos, Madrid: British Council.

Rousseau, J. (1762). Retrieved from Project Gutenberg (2009). http://www.gutenberg.org/catalog/world/readfile?fk_files=1561188&pageno=1.

Slee, R. (2012). Inclusion in schools: what is the task?. In C. Boyle & K. Topping, K (Eds.) *What Works in Inclusion?*. Maidenhead, England: Open University Press, McGraw-Hill Education.

Slee, R. (2011). *The irregular school: Exclusion, schooling and inclusive education*. Oxon, UK: Routledge.

Snow, P. & Powell, M. (2012). Youth (in)justice: Oral language competence in early life and risk for engagement in antisocial behaviour in adolescence. *Trends & Issues in Crime and criminal Justice*, *435*, 1-6.

Thomson, P., Lingard, B. & Wrigley, T. (2012). Reimagining school change: the necessity and reasons for hope. In T. Wrigley, P. Thomson & B. Lingard, (Eds.) *Changing schools: alternative ways to make a world of difference*. Oxon and New York, UK and USA: Routledge.

Topping, K. (2012). Conceptions of inclusion: Widening ideas. In C. Boyle & K. Topping, K (Eds.) *What Works in Inclusion?*. Maidenhead, England: Open University Press, McGraw-Hill Education.

UNESCO. (2005). *Guidelines for Inclusion: Ensuring Access to Education for All*, Paris, France: United Nations Educational, Scientific and Cultural Organization.

UNESCO. (1990). *World declaration on education for all*. Online at http://www.unesco.org/education/efa/ed_for_all/background/jomtien_declaration.shtml.

Voltz, D., Sims, M. & Nelson, B. (2010). *Connecting teachers, students, and standards: strategies for success in diverse and inclusive classrooms*. Alexandria, VA: ASCD.

Wilkinson, R. & Pickett, K. (2010). *The spirit level: Why equality is better for everyone*. London, England: Penguin Group.

Wrigley, T., Thomson, P. & Lingard, B. (2012). Resources for changing schools: Ideas in and for practice. In T. Wrigley, P. Thomson & B. Lingard. (Eds.) *Changing schools: Alternative ways to make a world of difference*. Oxon and New York: Routledge.

AFFILIATIONS

Joanna Anderson
Faculty of Education,
Monash University, Australia

Christopher Boyle
Faculty of Education,
Monash University, Australia

Joanne Deppeler
Faculty of Education,
Monash University, Australia

The ecology of inclusive education